

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A rewinding machine to form logs of wound web material, comprising:

[[•]] = a first winding roller (1);

[[•]] = a second winding roller (3);

[[•]] = a nip (5) defined between said first winding roller and said second winding roller, through which ~~said~~ web material is fed (7);

[[•]] = a rolling surface (8), extending upstream of said nip in relation to ~~the~~ a direction of feed of the web material and defining, with the first winding roller (1), a channel into which winding cores are fed, said channel having an inlet (9) and an outlet (11);

[[•]] = a feeder (13) to feed said winding cores into said channel;

[[•]] = a severing device (15) to sever the web material upon termination of winding a log, wherein said severing device (15) acts against ~~the~~ a surface of the first winding roller (1) to pinch the web material (7) against said first winding roller (1), the severing device having a ~~different~~ feed speed ~~to the~~ different from a peripheral speed of the first winding roller during contact with the web material; ~~characterized in that:~~ wherein said severing device is

disposed to operate on the web material in a position upstream of the inlet ~~end~~ of said channel, in relation to the direction of feed ~~(f7)~~ of the web material; said first winding roller ~~(1)~~ ~~has~~ having suction openings on ~~its~~ a cylindrical surface thereof; between ~~the~~ a position in which said severing device ~~(15)~~ operates and the inlet of said channel a suction box ~~(17)~~ is provided inside said first winding roller, an initial edge and a final ~~edges~~ edge of the web material produced by severing performed by the severing device being held via the suction openings on said first winding roller to transfer the initial edge to a new core being fed into said channel; and ~~that~~ glue applicator for applying glue is applied to the surface of the core along a line parallel to ~~the~~ an axis of said core.

2. (Currently Amended) Rewinding machine as claimed in claim 1, ~~characterized in that~~ wherein the ~~severing device (15) has a lower~~ feed speed of the severing device is lower than the peripheral speed of the first winding roller during contact with the web material.

3. (Currently Amended) Rewinding machine as claimed in claim 1 or 2, ~~characterized in that~~ wherein said feeder is controlled to bring the core into contact with the web material after severing.

4. (Currently Amended) Rewinding machine as claimed ~~in one or more of the previous claims, characterized in that~~ claim 1, wherein said feeder is controlled ~~such as~~ to cause the core to rest against the surface of the first winding roller at the inlet of the ~~feed~~ channel, when the final edge and the initial edge of the web material obtained by tearing have already moved beyond the inlet of said channel.

5. (Currently Amended) Rewinding machine as claimed ~~in one or more of the preceding claims, characterized in that:~~ claim 1, wherein said first winding roller ~~(1)~~ has on a cylindrical surface thereof ~~with~~ annular bands with a high friction coefficient and annular bands with a low friction coefficient; said severing device has a plurality of pressers ~~(25)~~; and said pressers ~~(25)~~ are positioned in relation to said first winding roller so that ~~they~~ the pressers press against ~~it~~ the first winding roller at the annular bands with a low friction coefficient.

6. (Currently Amended) Rewinding machine as claimed ~~in one or more of the previous claims, characterized in that~~ claim 1, wherein said suction openings are distributed over ~~the~~ an entire circumferential extension of said first winding roller ~~(1)~~.

7. (Currently Amended) Rewinding machine as claimed ~~in one or more of the previous claims, characterized in that~~

claim 1, wherein said severing device ~~(15)~~ is provided with a rotary movement during action on the web material.

8. (Currently Amended) Method for producing logs of wound web material, comprising ~~the phases of~~:

[[•]] ~~_ feeding the~~ web material ~~(7)~~ along a feed path;

[[•]] ~~_ arranging a first~~ winding roller and a second winding roller ~~(1, 3) defining so as to define~~ between them said first winding roller and said second winding roller a nip ~~(5)~~ through which to feed the web material ~~(7)~~;

[[•]] ~~_ arranging a~~ rolling surface ~~(8)~~ extending upstream of said nip ~~(5)~~ in relation to ~~the~~ a direction of feed ~~(f7)~~ of the web material along said feed path, said rolling surface and said first winding roller ~~(1)~~ defining a channel into which winding cores are fed, said channel having an inlet ~~(9)~~ and an outlet ~~(11)~~;

[[•]] ~~_ winding a first log (R) around a first winding core (A)~~;

[[•]] ~~_ upon termination of winding said first log (R), severing the web material to create an initial edge and a final edge, by pinching said web material with a severing device (15), said severing device (15) modifying the feed speed of the web material to cause it~~ the web material to tear, feeding a new winding core ~~(A)~~, anchoring the initial

edge to the new core and starting to wind a second log (R);
~~characterized in that:~~ wherein

[[•]] - the initial edge and the final edge are temporarily held on ~~the~~ a surface of the first winding roller;

[[•]] - said new core (A) is fed into said channel synchronously to ~~the~~ movement of the initial edge of the web material, so that ~~the~~ a contact point between the new core and the web material driven around said first winding roller is upstream of the initial edge in relation to the direction of feed of the web material along said feed path; and

[[•]] - ~~and~~ glue is applied to ~~the~~ a surface of the core along a line parallel to ~~the~~ an axis of said core.

9. (Currently Amended) Method as claimed in claim 8, ~~characterized in that~~ wherein the web material (7) is severed upstream of the inlet (9) of said channel, in relation to the direction of feed (f7) of the web material along said feed path and is fed, continuing to adhere to the first winding roller (1), to a position downstream of the position in which said ~~winding~~ core is pressed against the first winding roller.

10. (Currently Amended) Method as claimed in claim 8 or 9, ~~characterized in that~~ wherein said initial edge and said final edge are held on ~~the~~ a cylindrical surface of the first winding roller (1) by suction.

11. (Currently Amended) Method as claimed in ~~one or more of claims 8 to 10~~, characterized in that claim 8, wherein said severing device ~~(15)~~ slows the web material to cause ~~it~~ the web material to tear downstream of the contact point between ~~it~~ the core and the web material.

12. (Currently Amended) Method as claimed in ~~one or more of claims 8 to 11~~, characterized in that claim 8, wherein said severing device ~~(15)~~ pinches the web material against ~~the~~ a cylindrical surface of the first winding roller ~~(1)~~.

13. (Currently Amended) Method as claimed in ~~one or more of claims 8 to 12~~, characterized in that claim 8, wherein said feeder feeding is controlled so as to bring the core into contact with the web material after severing of the web material.

14. (Currently Amended) Method as claimed in ~~one or more of claims 8 to 13~~, characterized in that claim 8, wherein said feeder feeding is controlled ~~such~~ so as to cause the core to rest against ~~the~~ a surface of the first winding roller at the inlet of the ~~feed~~ channel, when the final edge and the initial edge of the web material obtained by tearing have already moved beyond the inlet of said channel.